

FULL DIGITAL DIMMING BALLAST FOR A FLUORESCENT LAMP

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ABSTRACT

[0066] A lamp control circuit is described, containing a power factor corrector, coupled to it a digitally controlled ballast, having power devices. The digitally controlled ballast is capable of powering a lamp. The ballast is controlled by a current feedback loop, coupled between the power devices and the digitally controlled ballast, and a voltage feedback loop, coupled between the lamp and the digitally controlled ballast. Further, a method of operating a lamp-control circuit is presented, the circuit containing a digital controller, an output stage, a current feedback loop, and a voltage feedback loop. In operation the digital controller receives a current feedback signal or a voltage feedback signal from the output stage and the lamp. In response to the received signal the digital controller generates a digital control signal and powers a lamp through the output stage according to the generated digital control signal.